

LICENSING CHECKLIST FOR MEDIUM (10 - 100 mCi)
AND
LARGER (>100 mCi) LABORATORIES

This checklist is to assist those applicants wishing to obtain licensure (or renewal) for laboratories. Include the following information and/or descriptions noted below on form RH-2050 or attachments thereto. Items not covered in this list are found in the guide, form RH-2051. All correspondence must be submitted in duplicate.

Item 1. Instrument Calibration:

- a. Method
 - 1. In-house: Provide procedures including radiation safety.
 - 2. Outside service: Specify authorized service company.
- b. Frequency

Item 2. Personnel Monitoring and bioassay:

- a. Film Badge/TLD's.
- b. Finger rings for >1 mCi, P-32 or I-131, 125 (test tube holders and shields required).
- c. Bioassays:
 - 1. If iodine, thyroid count.
 - 2. If H-3, urine.
 - 3. Others if needed.

Item 3. Facilities and Equipment:

- a. Diagram of storage/use areas.
- b. Hoods, glove boxes:
 - 1. hood face velocity at least 100 linear feet per minute.
 - 2. filtration (required for I-125, 131) (including exchange procedures).
 - 3. pressure (glove boxes): negative with respect to the outside.
 - 4. exhaust stack: specify location in relation to nearest air intake.

- c. Shielding (type and thickness) and remote handling tools.
- d. Security, posting, labeling.
- e. Fire protection of stored material (large quantities only).

Item 4. Radiation Safety Program:

- a. Operating and Emergency Procedures:
 - 1. General Safe Rules.
 - 2. Decontamination protocol.
- b. Survey Procedures:
 - 1. Direct meter surveys.
 - 2. Wipe test locations.
 - 3. Action levels (dpm/100 cm² when decontamination is necessary).
 - 4. Frequency (depends on use, specify).
- c. Package Ordering, Receipt and Opening Procedures:
 - 1. Wipe tests/action levels.
 - 2. Direct reading (γ emitters only), compliance with DOT regulations.
 - 3. Wipe final source container.
 - 4. Inventory control.
- d. Shipping Procedures: Only if authorized for distribution.

- e. Personnel Training Program:
 - 1. Outline.
 - 2. Refresher (frequency, duration).
 - 3. Ancillary personnel (large labs).

Item 5. Effluent and Environmental Monitoring:

- a. Sanitary sewer concentrations (based on disposals and water flow rates). Refer to Section 30287.
- b. Stack effluent. Refer to Section 30269. Larger quantities, or volatile materials.
- c. Vegetation/soil sampling (only for very large quantities with potential impact).

Item 6. Waste Disposal:

- a. Packaging solid, liquid, liquid scintillation vials, animal carcasses.
- b. Quality Assurance on drums ready for pick-up (tilt test, wipe tests, rad levels).
- c. Storage area secure, covered.
- d. Who picks it up?

Item 7. Decommissioning and Decontamination Plans: Specify plan and release limits.

Item 8. Certificate: Signature by official who can commit financially and legally for the applicant in Item 1.a.

Item 9. Miscellaneous:

- a. Management structure.
- b. RSO duties and responsibilities.
- c. animals: housing facilities, instructions to caretaker.

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